



Docket No.: 194543US2



COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/782,187

Applicants: Tetsuro MOTOYAMA, et al.

Filing Date: February 14, 2001

For: METHOD AND SYSTEM OF REMOTE
DIAGNOSTIC, CONTROL AND INFORMATION
COLLECTION USING A SHARED RESOURCE

Group Art Unit: 2155

Examiner: ISMAIL, SHAWKI SAIF

SIR:

Attached hereto for filing are the following papers:

APPEAL BRIEF (WITH APPENDIXES)

Our credit card payment form in the amount of **\$500.00** is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

TETSURO MOTOYAMA, ET AL. : EXAMINER: ISMAIL, SHAWKI SAIF

SERIAL NO: 09/782,187 :

FILED: FEBRUARY 14, 2001 : GROUP ART UNIT: 2155

FOR: METHOD AND SYSTEM OF
REMOTE DIAGNOSTIC, CONTROL AND
INFORMATION COLLECTION USING A
SHARED RESOURCE

APPEAL BRIEF

COMMISSIONER FOR PATENTS
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SIR:

Applicants appeal the outstanding Final Rejection of May 13, 2005, finally rejecting each of pending claims 1-36.

I. REAL PARTY IN INTEREST

The above-noted application is assigned to Ricoh Company, Ltd., which is the real party in interest, having a place of business at Tokyo, Japan.

II. RELATED APPEALS AND INTERFERENCES

The present application is related to U.S. Application No. 09/782,064, ("the '064 application"), which was filed on the same day as the present application. A Notice of Appeal was filed in the '064 application on September 20, 2005, while an Appeal Brief was filed on October 21, 2005. Even though it is presently believed that a decision in the '064

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application will not directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal, the '064 application is disclosed merely as a precaution to assure that full disclosure is made to the PTO.

III. STATUS OF CLAIMS

Claims 1-36 are pending in this application and the rejection of each of claims 1-36 is being appealed.

No claims were cancelled, but Claims 1, 2, 5, 13, 14, 17, 20, 21, 25, 26, and 29 were amended during prosecution of this application.

IV. STATUS OF AMENDMENTS

A Request for Reconsideration was filed subsequent to the Final Rejection dated May 13, 2005. Accordingly, all previously filed Amendments have been considered by the Examiner and are reflected in the attached claims.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The applicants of the present invention recognized that a problem exists in the current art in that until the present invention there was not an object-oriented system for collecting information regarding execution of a target application in an application unit.

Accordingly, Claim 1 sets forth an object-oriented system for collecting information regarding execution of a target application in an application unit. The system recited in Claim 1 is generally supported by Figures 9-12A (Figure 9 shows target applications 510, 512, and 513 in device/appliance 300) and the description related thereto in the specification, i.e., pages 23-31.

In particular, Claim 1 recites a monitoring device having a plurality of monitoring components, which finds supports, e.g., in Figures 9 and 10 (monitoring system 515). See also Figure 12A (event logger 840, system manager 830, data format processor 850, and protocol processor 860), and page 31, lines 24-27.

Further, Claim 1 recites a target application interface configured to receive a plurality of monitoring requests from the target application for processing by the monitoring device, which finds support, e.g., in Figure 12A (interface 810 and the start monitoring function), and page 30, lines 21-24; page 30, lines 8-13; and page 31, line 18 to page 32, line 17 of the specification.

Next, Claim 1 recites a system resource having at least one system resource component shared among the plurality of monitoring components using at least one abstract class, which finds support, e.g., in Figure 12A (system resource 870), and page 31, lines 20-30 of the specification. See also pages 25-30, which generally describe object-oriented programming and abstract classes.

Independent method Claims 13 and 25 recite limitations analogous to the limitations recited in Claim 1 and are supported by the originally filed specification and drawings in a manner analogous to the support for Claim 1 described above. In addition, the event logger recited in Claims 13 and 25 is supported by Figure 12A (event logger 840), and page 31, lines 24-28 of the specification.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection being appealed are as follows:

(1) whether the teachings of U.S. Patent No. 6,314,460 to Knight et al. (hereinafter “the ‘460 patent”) anticipates the subject matter of Claims 1-7, 13-19, and 25-31 under 35 U.S.C. § 102(e);¹ and

(2) whether the combined teachings of the ‘460 patent and U.S. Patent No. 5,706,434 to Kremen et al. (hereinafter “the ‘434 patent”) render obvious the subject matter of Claims 8-12, 20-24, and 32-36 were rejected under 35 U.S.C. § 103(a).

VII. ARGUMENT

Claims 1-12

Claim 1 is directed to an object-oriented system for collecting information regarding execution of a target application in an application unit, comprising: (1) a monitoring device having a plurality of monitoring components; (2) a target application interface configured to receive a plurality of monitoring requests from the target application for processing by the monitoring device; and (3) a system resource having at least one system resource component shared among the plurality of monitoring components using at least one abstract class.

Regarding the rejection of Claim 1 as anticipated by the ‘460 patent, the ‘460 patent is directed to a method and system for analyzing a storage network attached to at least one host computer system through multiple controllers. As shown in Figure 1, the ‘460 patent discloses a distributed storage management program comprising a central manager portion and a separate agent residing in each of the host computer systems. The ‘460 patent discloses

¹ Although page 3 of the Office Action dated May 13, 2005, indicates that Claims 1-36 were rejected under 35 U.S.C. § 102, the Examiner confirmed in a telephone discussion on November 30, 2004, that only Claims 1-6, 13-19, and 25-31 should have been rejected on that basis. Accordingly, since the final Office Action appears to be repeating the rejection set forth in the first Office Action, Applicants believe that only Claims 1-7, 13-19, and 25-31 are rejected under 35 U.S.C. § 102(e).

that the agents gather data and communicate with the manager across a communication path independent of the storage network, while the manager collates the data from different agents to produce a current view of the storage network.² Further, the '460 patent discloses that each agent operates as a server, responding to data requests from the central manager. However, Applicants respectfully submit that the '460 patent fails to disclose a target application interface configured to receive a plurality of monitoring requests from the target application for processing by the monitoring device.

In particular, it is unclear from the final Office Action which elements of the '460 patent correspond to the claimed target application and to the claimed application unit. Page 3 of the outstanding Office Action states that "the agents act as an interface unit between the monitored device and the monitoring system," while page 7 states that "the local agents (target application) send the gathered data to the central manager (target application interface)." Thus, it appears that the Office Action is asserting that the local agents are both a target application and a target application interface, while the central manager is also a target application interface. Further, page 3 of the Office Action refers to column 3, lines 17-25 of the '460 patent as disclosing the claimed monitoring components. Since that passage of the '460 patent describes the local agents, the Office Action appears to be implying that the agents are also the claimed monitoring components, in addition to being the target application and the target application interface.

Thus, Applicants submit that the '460 patent fails to disclose a plurality of monitoring requests from the target application to the target application interface, as recited in amended Claim 1. In this regard, Applicants note that the Office Action fails to identify requests that are *from* the target application and *for* processing by the monitoring device. Rather, under the interpretation set forth in the Office Action, either (1) the local agents receive a plurality

² '460 patent, column 3, lines 17-23.

of monitoring requests from themselves, or (2) the central manager receives a plurality of monitoring requests from the local agents. However, Applicants respectfully submit that the first scenario is impossible, and the second scenario is not disclosed by the '460 patent. Rather, the '460 patent discloses that the central manager sends requests to monitor the storage network to the local agents.³

In the Advisory Action dated August 19, 2005, the Examiner clarifies his rejection of Claim 1 by stating that the components disclosed by the '460 patent read on the claimed elements in the following manner: (1) the '460 local agents are the claimed target application; (2) the '460 storage network is the claimed application unit; (3) the sending of gathered data by the agents to the central manager corresponds to the claimed plurality of monitoring requests; (4) the '460 central manager is the target application interface; and (5) the '460 "manager" is the claimed monitoring device.

However, in analyzing the Examiner's assignment of the claimed elements, Applicants note the following deficiencies. First, it is unclear to Applicants whether the Examiner is asserting that the '460 patent discloses a "central manager" as well as a separate "manager." Applicants respectfully submit that the '460 patent does not disclose separate managers and that the '460 patent refers to the central manager 110 as both the "central manager" and the "manager" interchangeably. Further, if the "manager" is the claimed monitoring device, Claim 1 requires that it have a plurality of monitoring components, which are not specifically identified by the Examiner.

In addition, under the Examiner's Advisory Action interpretation, the central manager (target application interface) is configured to receive monitoring requests from the local agents (target application) for processing by the "manager" (monitoring device). However, as stated above, the '460 patent discloses that the central manager sends monitoring *requests* to

³ See '460 patent, column 14, lines 22-28.

monitor the storage network to the local agents.⁴ The '460 patent does not disclose that *monitoring requests* are sent from the local agents to the central manager.

Further, Claim 1 requires a system resource having at least one system resource component shared among the plurality of monitoring components using at least one abstract class. Although the Advisory Action does not mention the claimed system resource or the monitoring components, the Office Action indicates that the local agents are the monitoring components (apparently, in addition to being the target application). Moreover, the Office Action refers to Figure 7 and columns 10, 11, and 13 of the '460 patent as disclosing the claimed system resource. However, those portions of the '460 patent refer to the object-oriented implementation of the *central manager* and do not disclose that system resource components are shared among the claimed monitoring components (agents?), as required by Claim 1.

Accordingly, for the reasons stated above, Applicants respectfully traverse the rejection of Claim 1 (and dependent Claims 2-7) as anticipated by the '460 patent.

Regarding the rejection of dependent Claims 8-12 under 35 U.S.C. § 103, Applicants respectfully submit that the '434 patent fails to remedy the deficiencies of the '460 patent, as discussed above. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claims 8-12 should be withdrawn.

Claims 13-36

Independent Claim 13 is directed to an object-oriented computer-implemented method for collecting information regarding execution of a target application in an application unit, the method comprising the steps of: (1) monitoring the target application, by

⁴ See '460 patent, column 14, lines 22-28.

a device having a plurality of monitoring components, to obtain the information regarding execution of the target application, wherein the plurality of monitoring components includes an event logger, and wherein the step of monitoring includes the steps of accessing a shared system resource and executing a plurality of instructions included in the system resource; and (2) storing, in the event logger, a portion of the information obtained by the step of monitoring.

Regarding Claim 13, the Office Action relies on its rejection of Claim 1 in rejection of Claim 13.⁵ Accordingly, based on the above discussion regarding Claim 1, Applicants will assume that the Office Action is equating the claimed target application with the '460 local agents, and is equating the claimed application unit with the '460 storage network. Moreover, Applicants assume that the Office Action is implying that the "device" recited in Claim 1 is read on by the '460 central manager. However, Applicants respectfully submit that the '460 patent fails to disclose monitoring the target application, by a device having a plurality of monitoring components, to obtain the information regarding execution of the target application, as recited in Claim 13. The '460 patent does not disclose that the local agents are monitored by the central manager to obtain information regarding execution of the local agents. Rather, the '460 patent discloses that the local agents monitor the storage network.

Further, Applicants respectfully submit that the '460 patent fails to disclose a device having a plurality of monitoring components including an event logger, wherein information obtained in a monitoring step is stored in the event logger, as recited in Claim 13. It is unclear whether the Office Action is interpreting the local agents to the claimed monitoring components, as discussed above. If so, it is unclear what device has the monitoring components (including the event logger) as required by Claim 13. Applicants submit that, if the central manager is equated with the claimed device, this would require the local agents to

⁵ See Page 3 of the final Office Action.

be part of the central manager, which is not disclosed by the '460 patent. Further, Applicants note that the Office Action is silent regarding the event logger and the step of executing a plurality of instructions included in a system resource recited in Claim 13.

Accordingly, for the reasons stated above, Applicants respectfully traverse the rejection of Claim 13 (and dependent Claims 14-19) as anticipated by the '460 patent.

Independent Claim 25 recites limitations analogous to the limitations recited in Claim 13. Accordingly, for the reasons stated above for the patentability of Claim 13, Applicants respectfully traverse the rejections of Claim 25 (and dependent Claims 26-31) as anticipated by the '460 patent.

Regarding the rejection of dependent Claims 20-24 and 32-36 under 35 U.S.C. § 103, Applicants respectfully submit that the '434 patent fails to remedy the deficiencies of the '460 patent, as discussed above. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and that the rejection of Claims 20-24 and 32-36 should be withdrawn.

VIII. CONCLUSION

For the foregoing reasons, Applicant respectfully submits that each of claims 1-36 patently distinguishes over the combination of teachings of the '460 and '434 patents. Therefore, the outstanding rejections must be REVERSED.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Rejected) An object-oriented system for collecting information regarding execution of a target application in an application unit, the system comprising:
 - a monitoring device having a plurality of monitoring components;
 - a target application interface configured to receive a plurality of monitoring requests from the target application for processing by the monitoring device; and
 - a system resource having at least one system resource component shared among the plurality of monitoring components using at least one abstract class.
2. (Rejected) The system according to Claim 1, wherein the at least one system resource component includes at least one of a system clock, persistent system information storage, electronic mail transfer code, and file transfer code.
3. (Rejected) The system according to Claim 1, wherein at least one of the plurality of monitoring components accesses the system resource using a system resource interface.
4. (Rejected) The system according to Claim 1, wherein the target application includes one of a software program being executed on a computer or workstation under control of a user, a software program driving a control panel of a business device, a software program driving a control panel of an appliance, software generating data regarding state changes within a device, and software generating data regarding state changes within an appliance.

5. (Rejected) The system according to Claim 1, wherein the information regarding execution of a target application includes at least one of a user identification, an application identification, a cumulative session number, a value of a starting time, a value of a duration, and an indication of a sequence of events with a corresponding elapsed time for each one of the events.

6. (Rejected) The system according to Claim 1, wherein the at least one system resource component includes a persistent system registry used for storing at least one of an application identification, a value indicating a cumulative usage, an indication of a local directory, a user identification, an indication of a Simple Mail Transfer Protocol (SMTP) server, an indication of at least one recipient of data to be transmitted, an indication of a value of from data for data to be transmitted, an indication of a File Transfer Protocol (FTP) server, an indication of an FTP user, an indication of an FTP password, and an indication of an FTP target path.

7. (Rejected) The system according to Claim 1, wherein the monitoring device having a plurality of monitoring components includes an event logger and wherein the at least one system resource component includes a system clock, wherein the event logger accesses the system clock at least for recording a time of starting a monitoring session.

8. (Rejected) The system according to Claim 1, wherein the monitoring device having a plurality of monitoring components includes a transmitting device configured to transmit, to a predetermined recipient, formatted data corresponding to the information regarding execution of the target application.

9. (Rejected) The system according to Claim 8, wherein the monitoring device having a plurality of monitoring components includes a formatting device configured to process the information regarding execution of the target application into the formatted data to be transmitted by the transmitting device.

10. (Rejected) The system according to Claim 9, wherein the formatting device includes a data format processor configured to format the information regarding execution of the target application according to a requested data format.

11. (Rejected) The system according to Claim 8, wherein the transmitting device includes a protocol processor configured to transmit the formatted data through a requested communication protocol.

12. (Rejected) The system according to Claim 11, wherein the at least one system resource component includes electronic mail transfer code and file transfer code, and wherein the protocol processor is configured to access at least one of the electronic mail transfer code and the file transfer code for transmitting the formatted data through the requested communication protocol.

13. (Rejected) An object-oriented computer-implemented method for collecting information regarding execution of a target application in an application unit, the method comprising the steps of:

monitoring the target application, by a device having a plurality of monitoring components, to obtain the information regarding execution of the target application, wherein the plurality of monitoring components includes an event logger, and wherein the step of

monitoring includes the steps of accessing a shared system resource and executing a plurality of instructions included in the system resource; and

storing, in the event logger, a portion of the information obtained by the step of monitoring.

14. (Rejected) The method according to Claim 13, wherein the system resource includes at least one of a system clock, persistent system information storage, electronic mail transfer code, and file transfer code.

15. (Rejected) The method according to Claim 13, wherein each one of the plurality of monitoring components accesses the system resource using a system resource interface.

16. (Rejected) The method according to Claim 13, wherein the target application includes one of a software program being executed on a computer or workstation under control of a user, a software program driving a control panel of a business device, a software program driving a control panel of an appliance, software generating data regarding state changes within a device, and software generating data regarding state changes within an appliance.

17. (Rejected) The method according to Claim 13, wherein the information regarding execution of a target application includes at least one of a user identification, an application identification, a cumulative session number, a value of a starting time, a value of a duration, and an indication of a sequence of events with a corresponding elapsed time for each one of the events.

18. (Rejected) The method according to Claim 13, wherein the system resource includes a persistent system registry used for storing at least one of an application identification, a value indicating a cumulative usage, an indication of a local directory, a user identification, an indication of a Simple Mail Transfer Protocol (SMTP) server, an indication of at least one recipient of data to be transmitted, an indication of a value of from data for data to be transmitted, an indication of a File Transfer Protocol (FTP) server, an indication of an FTP user, an indication of an FTP password, and an indication of an FTP target path.

19. (Rejected) The method according to Claim 13, wherein the system resource includes a system clock, and wherein the event logger accesses the system clock at least for recording a time of starting a monitoring session.

20. (Rejected) The method according to Claim 13, further comprising: transmitting, to a predetermined recipient, formatted data corresponding to the information regarding execution of the target application.

21. (Rejected) The method according to Claim 20, further comprising: processing the information regarding execution of the target application into the formatted data to be transmitted by the transmitting device.

22. (Rejected) The method according to Claim 21, wherein the step of processing the information includes formatting the information regarding execution of the target application according to a requested data format.

23. (Rejected) The method according to Claim 20, wherein the step of transmitting includes transmitting, through a protocol processor, the formatted data through a requested communication protocol.

24. (Rejected) The method according to Claim 23, wherein the system resource includes electronic mail transfer code and file transfer code, and wherein the protocol processor is configured to access at least one of the electronic mail transfer code and the file transfer code for transmitting the formatted data through the requested communication protocol.

25. (Rejected) A program product for collecting information regarding execution of a target application in an application unit, the program product comprising a computer readable medium embodying program instructions for causing an object-oriented system to perform the steps of:

monitoring the target application, by a device having a plurality of monitoring components, to obtain the information regarding execution of the target application, wherein the plurality of monitoring components includes an event logger, and wherein the step of monitoring includes the steps of accessing a shared system resource and executing a plurality of instructions included in the system resource; and

storing, in the event logger, a portion of the information obtained by the step of monitoring.

26. (Rejected) The program product according to Claim 25, wherein the system resource includes at least one of a system clock, persistent system information storage, electronic mail transfer code, and file transfer code.

27. (Rejected) The program product according to Claim 25, wherein at least one of the plurality of monitoring components accesses the system resource using a system resource interface.

28. (Rejected) The program product according to Claim 25, wherein the target application includes one of a software program being executed on a computer or workstation under control of a user, a software program driving a control panel of a business device, a software program driving a control panel of an appliance, software generating data regarding state changes within a device, and software generating data regarding state changes within an appliance.

29. (Rejected) The program product according to Claim 25, wherein the information regarding execution of a target application includes at least one of a user identification, an application identification, a cumulative session number, a value of a starting time, a value of a duration, and an indication of a sequence of events with a corresponding elapsed time for each one of the events.

30. (Rejected) The program product according to Claim 25, wherein the system resource includes a persistent system registry used for storing at least one of an application identification, a value indicating a cumulative usage, an indication of a local directory, a user identification, an indication of a Simple Mail Transfer Protocol (SMTP) server, an indication of at least one recipient of data to be transmitted, an indication of a value of from data for data to be transmitted, an indication of a File Transfer Protocol (FTP) server, an indication of an FTP user, an indication of an FTP password, and an indication of an FTP target path.

31. (Rejected) The program product according to Claim 25, wherein the system resource includes a system clock, and wherein the event logger accesses the system clock at least for recording a time of starting a monitoring session.

32. (Rejected) The program product according to Claim 25, wherein the program instructions cause the system to further perform the step of transmitting, to a predetermined recipient, formatted data corresponding to the information regarding execution of the target application.

33. (Rejected) The program product according to Claim 32, wherein the program instructions cause the system to further perform the step of processing the information regarding execution of the target application into the formatted data to be transmitted by the transmitting device.

34. (Rejected) The program product according to Claim 33, wherein the step of processing the information includes formatting the information regarding execution of the target application according to a requested data format.

35. (Rejected) The program product according to Claim 32, wherein the step of transmitting includes transmitting, through a protocol processor, the formatted data through a requested communication protocol.

36. (Rejected) The program product according to Claim 35, wherein the system resource includes electronic mail transfer code and file transfer code, and wherein the

protocol processor is configured to access at least one of the electronic mail transfer code and the file transfer code for transmitting the formatted data through the requested communication protocol.

EVIDENCE APPENDIX

None

RELATED PROCEEDING APPENDIX

None